GeneAmp® PCR System 9600 Routine Maintenance

The GeneAmp® PCR System 9600 has a strong performance history. To maintain the instrument in top working order it is advisable to perform routine maintenance on the instrument. Depending on the level of instrument usage, it is recommended that the following procedures be performed at least 2-4 times per year. For high end users a 3-month maintenance cycle is recommended and for lower end users a 6-month maintenance cycle is recommended.

***Cleaning the Sample Wells*:**

- Turn off the instrument and let instrument cool for 20-30 minutes.
- Thoroughly clean wells with a cotton swap soaked with 100% isopropanol.
- If wells are contaminated, clean thoroughly with a cotton swab soaked with a 10% bleach solution.
- Rinse wells with water.
- Wells should be completely dry before using instrument.

Cleaning the Heated Cover:

- Turn off the instrument and let instrument cool for 20-30 minutes.
- Raise the heated cover lever. Please refer to the GeneAmp® PCR System 9600 User's Manual (Chapter 8, page 8-3) for detailed information on raising the heated cover.
- Gently wipe the bottom of the heated cover with a cloth soaked with 100% isopropanol.
- If the heated cover is contaminated, wipe the bottom of the cover with a cloth soaked in a 10% bleach solution.
- Rinse with water.
- Wait for the cover to dry before returning the cover to its normal position.

Running the Temperature Verification Tests:

The Temperature Verification Tests includes running the Temperature Calibration Test and Temperature Non-Uniformity Test (TNU). These tests are designed to assess the thermal dynamics of the instrument. Please refer to the GeneAmp® PCR System 9600 User's Manual (Chapter 8) or the TVS User's Manual for complete instruction.

NOTE: The following procedures require the use of a Temperature Verification System (TVS P/N 4317939 or N801-0435).

- Temperature Calibration Test (page 8-4) - verifies that the instrument meets temperature accuracy specifications.
- Temperature Non-Uniformity Test (page 8-13) - verifies the temperature uniformity of the sample block.

An instrument that fails these tests may require service by a qualified Applied Biosystems repair specialist. Please call 1-800-831-6844, Option 1 to contact the Service Call Center (U.S. only). For all other countries, please contact your local Applied Biosystems service representative.

Running the Diagnostic Tests:

The Diagnostic Tests are designed to assess the integrity of the heating and cooling systems on the 9600. For complete details on performing these tests please refer to the GeneAmp® PCR System 9600 User's Manual (Chapter 7). The 3 tests that can be conducted by the end user are:

- Heater Test (page 7-51) - verifies the performance of the sample block heaters and electronics
- Chiller Test (page 7-53) - verifies the performance of the refrigeration system
- System Performance Test (page 7-55) - a series of comprehensive tests of the heating and cooling systems

If any of these tests fail you may wish to perform a coolant check. Once you have performed the coolant procedure run the 3 tests again. If any of these tests again fail the instrument will require service by a qualified Applied Biosystems repair specialist.

Please call 1-800-831-6844, Option 1 to contact the Service Call Center (U.S. only). For all other countries, please contact your local Applied Biosystems service representative.